Maintenance and Care of Respirators

Employers are required to provide employees using respirators with a respirator that is clean, sanitary and in good working order. These requirements are a vital part of any successful respiratory protection program. To ensure that the respirator remains serviceable and delivers effective protection, a maintenance program must be in place prior to respirator use. As a minimum, the respiratory protection program must contain the following elements of a respirator maintenance program:

- Cleaning and disinfecting procedures;
- Proper storage;
- Regular inspections for defects (including leak check); and
- Repair methods

In addition, the manufacturer's instructions for inspection, cleaning and maintenance should be consulted to ensure that the respirator continues to properly function.

Cleaning and Disinfecting

To prevent skin irritation, dermatitis and to encourage worker acceptance, respirators must be cleaned and sanitized. Buildup of particulate contaminants on the respirator face-to-facepiece seal or on the interior of the facepiece will reduce the protection provided to the respirator user because the contaminant is in the breathing zone or has compromised the ability of the facepiece to form a seal with the face. In addition, it can lead to deterioration of respirator components, thereby reducing the level of protection to the user. Full facepiece respirators must be completely cleaned to ensure that employees can see through the facepiece.

Respirators worn exclusively by an employee must be cleaned and disinfected as often as necessary to be maintained in a sanitary condition. Respirators worn by more than one person must be cleaned and disinfected prior to being used by another individual. Emergency use respirators and respirators used for fit testing must be cleaned and disinfected after each use. The procedures used must be those recommended by the manufacturer or must be at least as effective as the OSHA method for cleaning and disinfecting respirator facepieces—see Appendix I of this industry guide.

Storage

Respirators must be stored to protect them against damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals. When packed or stored, the facepiece and exhalation valve must be stored in a manner that will prevent warping.

Respirators intended for emergency use must be kept accessible to the work area, but not in an area that might be involved in the emergency, making the respirator inaccessible or resulting it its contamination. Emergency-use respirators must be stored in compartments or covers that are clearly marked to indicate that they contain emergency respirators, and stored according to manufacturer instructions.

Inspection

Respirators must be inspected on a regular basis to ensure their continued reliability. The frequency of inspections depends upon whether the respirator is used or non-emergency, emergency or escape use only. Respirators used in *non-emergency situations* must be inspected before each use and during cleaning. *Emergency use* respirators must be inspected at least monthly and in accordance with the manufacturer's instructions, and checked for proper function before and after each use. *Emergency escape-only* respirators must be inspected before being carried into the workplace.

Inspections of all respirators must include a check of respirator function, tightness of connections, and the conditions of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters. In addition, the elastomeric parts must be evaluated for pliability and signs of deterioration.